

Curriculum Vitae

Name: Yahya Alshawabkeh
Academic Rank: Associate Professor
University: Hashemite University
Faculty: Queen Rania Faculty of Tourism & Heritage
Current Department: Conservation Science
Specialization: Architectural Photogrammetry
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Date of Birth: 23/02/1975
Place of Birth: Amman
Nationality: Jordanian
Marital Status: Married with four children
Languages: Arabic, English and German



EDUCATION

- 2003-2006 PhD degree in Architectural Photogrammetry (Terrestrial Positioning System and Computer Vision Group) Faculty for Photogrammetry, Stuttgart University. Title of Thesis “Integration of Laser Scanning and Photogrammetry for Heritage Documentation”.
- 1998-2001 M.Sc. degree in Civil Engineering, from Jordan University of Science and Technology. Title of Thesis “Traffic Delay at Roundabouts in Jordan”
- 1993-1998 B.Sc. in Civil Engineering/ Transportation, Jordan University of Science and Technology.

AREAS OF INTEREST

- Architectural Photogrammetry.
- Laser Scanning and Image segmentation
- 3D Modeling Techniques
- Texture Mapping
- Integration of Surveying Techniques for 2D-3D Heritage Documentation.

COMPUTER SKILLS

C++, Photomodeler, PCI, Arc GIS, AutoCAD, 3D Studio Max, Photoshop, Flash, Illustrator, Google Sketch up.

ACADEMIC AND ADMINISTRATIVE RESPONSIBILITIES:

2018-Current: Associate Professor, Department of Geomatics, Faculty of Architecture and Planning, King Abdulaziz University.

2016-2017: Associate Professor, Department of Surveying Engineering, Faculty of Engineering, Al – al Bayt University.

2013-2016: Associate Professor, Department of Conservation Science, Queen Rania Faculty of Tourism & Heritage, Hashemite University.

2014-2016: Dean of Queen Rania Faculty of Tourism & Heritage, Hashemite University.

2013-2014: Vice Dean of Queen Rania Faculty of Tourism & Heritage, Hashemite University.

2011-2012: Head of the conservation science department; Queen Rania Faculty of Tourism & Heritage, Hashemite University.

2010-2011: Scientific Committee Co-Chair for the second international conference on Digital Media and its Applications in Cultural Heritage, DMACH 2011, Amman 13-16 March.

2009-2010: Assistant Dean; Queen Rania Faculty of Tourism & Heritage, Hashemite University.

2008-2009: Head of the conservation science department, Hashemite University, Hashemite University.

2007-2012: Assistant Professor in the conservation science department, Hashemite University

2001-2003: Teaching assistant in civil engineering department / the Hashemite University (Surveying, Surveying Laboratory and Engineering Drawings)

1998-2001: Teaching Assistant in civil engineering department / Jordan University of Science and Technology (Surveying, Surveying Laboratory and Photogrammetry)

GRANTS

Ambassador's Fund for Cultural Preservation (AFCP), grant for restoration and rehabilitation of Roman Nymphaeum. October 2014- September 2016.

Duetsche Forschungsgemeinschaft (DFG) Scholarship, Germany. Fellowship for guest Prof. June-August 2013.

Duetsche Forschungsgemeinschaft (DFG) Scholarship, Germany. Fellowship for guest Prof. June 1st 2010 – August 30th 2010.

Duetsche Forschungsgemeinschaft (DFG) Scholarship, Germany. Fellowship for guest Prof. June 3rd 2008 – September 1st 2008.

EU project "New Archaeological Research Network for Integrating Approaches to ancient material studies ", FP7 project. Funded by the European Union, 2011-2015

Ministry of Higher Education and Scientific Research for granting a research project "Megalithic Culture in the Upper Wadi al-Zarqa" 2011-present.

The Deanship of Research and Graduate Studies at the Hashemite University for granting a Research project (Using Photogrammetry and Laser Scanning for Documentation of Heritage Sites in Jordan), 2007-2010.

TEACHING RESPONSIBILITIES

Conservation Department/ Hashemite University

- Remote Sensing in Archaeology.
- Archaeological Information Systems.
- Applications of Visual Communication in Heritage
- Informatics and Archaeology
- History of Architecture

Department of Surveying Engineering / Al- al Bayt University

- Photogrammetry (1)
- Advanced Photogrammetry
- Surveying Fundamentals
- Special topics in surveying engineering

Department of Geomatics/ King Abdulaziz University

- Introduction to geomatics
- Surveying fundamentals for Geomatics
- Principles of Photogrammetry
- Digital Photogrammetry

PUBLICATION

Yahya Alshawabkeh, Ahmad Baik, Yehia Miky [2021]

Integration of Laser Scanner and Photogrammetry for Heritage BIM Enhancement, ISPRS International Journal of Geo-Information.10(5):316. <https://doi.org/10.3390/ijgi10050316>

Yahya Alshawabkeh [2020]

Color and Laser Data as a Complementary Approach for Heritage Documentation. Remote Sensing, 12(20):3465. <https://doi.org/10.3390/rs12203465>

Yahya Alshawabkeh [2020]

Linear feature extraction from point cloud using color information, Journal of Heritage Science, volume 8, issue 1:28. <https://doi.org/10.1186/s40494-020-00371-6>

Yahya Alshawabkeh, Mohammad El-Khalili, Eyad Al masri, Fadi Balaawi, Amaal Al-Massarweh [2020]

Heritage Documentation using Laser Scanner and Photogrammetry: The Case Study of Qasr Al-Abidit, Jordan. Journal of Digital Applications in Archaeology and Cultural Heritage, Volume 16, March 2020.

A'kif Al-Fugara, Abdel Rahman AL-Shabeeb, **Yahya Alshawabkeh**, Hani AL-Amoush, Rida AL-Adamat. **[2018]**

Simulation and Prediction of Urban Spatial Expansion in Highly vibrant Cities Using the sleuth Model: A Case Study of Amman Metropolitan, Jordan. Theoretical and Empirical Researches in Urban Management, Volume 13, Issue 1, February.

Fadi Bala'awi, **Yahya Alshawabkeh** , Eyad Al masri and Mairna H. Mustafa **[2018]**

Salt damage and environmental conditions: A thermodynamic approach from the northern roman theater in Jerash, Jordan. Article in Mediterranean Archaeology and Archaeometry 18(2):49-66 .

Eyad Almasri , Fadi Bal'awi, **Yahya Alshawabkeh** [2017]
An artistic, mythological and documentary study of the Atargatis panel from et-Tannur, Jordan, *Acta Antiqua Journal*, 57, 2017, 515–534.

Eyad Almasri , **Yahya Alshawabkeh**, Fadi Bal'awi, Allaa Shwater [2017]
An Enthroned Tyche Statue from Gadara / Umm Qais, Jordan, *ACTA HISTORIAE ARTIUM*, Tomus 58(1), pp. 5–20.

Monther Jamhawi, Yahya **Alshawabkeh**, Ahmed Freewan and Rami Al- Gharaibeh [2016]
Combined Laser Scanner and Dense Stereo Matching Techniques for 3D Modelling of Heritage Sites: Dar Es-Saraya Museum. *Mediterranean Archaeology and Archaeometry* 16(3):185–192

A'kif Al-Fugara, Rida Al-Adamat, **Yahya Al-Shawabkeh**, Omar Al-Kour, Abdel Rahman Al-Shabeeb [2016]
A Multi-Resolution Photogrammetric Framework for Digital Geometric Recording of Large Archeological Sites: Ajloun Castle-Jordan, *International Journal of Geosciences*, 2016, 7, 425-439.

A'kif Al-Fugara, Rida Al-Adamat, Mwfeg Al Haddad, **Yahya Al-Shawabkeh**, Mohammed El-Khalili, Daifallah Obaidat [2016]
Using of Laser Scanning and Dense Stereo Matching for 3D Documentation and Virtual Reconstruction of the Ancient Sama Monastery/ Jordan, *International Journal of Remote Sensing Applications (IJRSA)* Volume 6, pp. 19-29.

Mohammad El-Khalili, Nizar Al Adarbeh, **Yahya Al Shawabkeh**, Abdulraouf Mayyas [2013]
Roman Nymphaeum in Amman: Documentation and Architectural Study. *Disegnare Idee Immagini / Drawing ideas images Journal*, Universita di Roma “La Sapienza”. Vol. 47 (No. 2), pp 36–45.

Yahya Alshawabkeh and Mohammed El-Khalili [2013]
Detection and quantification of material displacements at historical structures using photogrammetry and laser scanning techniques, *Mediterranean Arhaeology and Archaeometry*, Vol. 13, No 2. pp. 57-67.

Bala'awi, F., Alawneh, F., **Alshawabkeh, Y.**, and Al Masri E. [2012]
Damage Assessment and Digital 2D-3D Documentation of Petra Treasury, *Mediterranean Archaeology & Archaeometry (MAA)*. Vol 12, No2, Pp. 21-41.

Firas Alawneh, Fadi Bala'awi, Naif Haddad, **Yahya Al-Shawabkeh** [2011]
Analytical Identification and Conservation Issues of Painted Plaster from Qaser Amra in Jordan, *International Journal of Conservation Science*, Volume 2, Issue 2, pp. 235-250.

Yahya Alshawabkeh, Khaled Douglas, Mohammad Matarya and Bilal Khrisat [2011]
Combined Photogrammetric Techniques and Computer Vision: 2D-3D Recording of Gharissa, Jordan, *Journal of Architectural Conservation*, Volume 17 No. 2: 77-92.

Sharaf Al-Kheder, Naif Haddad, Mahmood Abo Jaber, **Yahya Al-Shawabkeh**& Leen Fakhoury [2010]
Socio-Spatial Planning problems within Jordan Valley, Jordan: Obstacles to Sustainable Tourism Development, *Tourism and Hospitality Planning & Development*, Volume 7, Number 4, pages 353-378.

Alshawabkeh, Yahya, Haala, Norbert & Fritsch, Dieter [2010].
A New True ortho-Photo Methodology for Complex Archaeological Application, Journal of Archaeometry, University of Oxford, Volume 52, Issue 3, pages 517–530.

Alshawabkeh, Yahya, Balawi, Fadi & Haala, Norbert [2010].
3D Digital Documentation, Assessment, and Damage Quantification of the Al-Deir Monument in the Ancient City of Petra, Jordan, Conservation and Management of Archaeological Sites, UCL, Volume 12, Number 2, pp. 124-145.
Sharaf Al-kheder, **Yahya Al-shawabkeh**, Norbert Haala [2009].
Developing a Documentation System for Desert Palaces in Jordan Using 3D Laser Scanning and Digital Photogrammetry. Journal of Archaeological Science, Volume 36, Issue 2, February 2009, Pages 537-546.

Alshawabkeh, Yahya, Haala, Norbert & Fritsch, Dieter [2007]
Registrierung terrestrischer Bild-und LIDAR Daten für die Dokumentation von Kulturdenkmälern, Photogrammetrie, Fernerkundung, Geoinformation 3/2007, Page 197-206, 11 Abb.

CONFERENCES

Preparatory Committee Chair of first the international conference in Tourism Management and Heritage conservation. Organized by the Queen Rania Faculty of Tourism and Heritage at the Hashemite University in collaboration with Scientific Research Support Fund in Jordan. Hashemite University, **Zarqa, 15 - 18 March 2016**.

Scientific Committee Co-Chair for the second international conference on Digital Media and its Applications in Cultural Heritage, **DMACH 2011**, Amman 13-16 March.

Scientific Committee Chair of the workshop: Surveying engineering applications in cultural and natural heritage management and preservation. Al al-Bayt University, Mafrqa, **18 April 2018**.

Fadi Bala'awi, Firas Alawneh, **Yahya Alshawabkeh** and Mohammed Waheeb [2011]
Conservation Work at Petra: what had been done and what is needed, the Second International conference on Conservation of Architecture, Urban Areas and Landscape (Heritage 2011), Volume 2, pp.267-284.

Alshawabkeh, Y., Haala, N. & Fritsch, D. [2008]
Range Image Segmentation Using the Numerical Description of the Mean Curvature Values. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVII, Part B5, Commission 5. ISPRS Congress 2008, Beijing, China. P. 533ff. ISSN 1682-1750.

Alshawabkeh, Yahya, Haala, Norbert & Fritsch, Dieter [2006]
2D-3D Feature Extraction and Registration of Real World Scenes. IAPRS Vol. XXXVI, Part V, Symposium 'Image engineering and vision metrology', pp. 32-37. Dresden, Germany.

Haala, Norbert & Alshawabkeh, Yahya [2006]
Combining Laser Scanning and Photogrammetry - A Hybrid Approach for Heritage Documentation. Joint Conferences ISPRS WG V/2, CIPA, VAST, EG 2006.

Haala, N., Kada, M., Becker, S., Böhm, J. & **Alshawabkeh, Y.** [2006]
Graphics Tools for the Generation of Large Scale Urban Scenes. IAPRS Vol. XXXVI Part 4,
"Geospatial Databases for Sustainable Development" on CD.

Alshawabkeh, Yahya [2005]
Using Terrestrial Laser Scanning for the 3D Reconstruction of Petra / Jordan.
Photogrammetric Week '05, Wichmann, Heidelberg, pp. 39-47.

Alshawabkeh, Yahya & Haala, Norbert [2005]
Automatic Multi-Image Photo-Texturing of Complex 3D Scenes. CIPA 2005 IAPRS Vol. 34-
5/C34, pp. 68-73. Turin, Italy.

Böhm, Jan, Haala, Norbert, **Alshawabkeh, Yahya** [2005]
Automation in laser scanning for cultural heritage applications, International Workshop on
Recording, Modeling and Visualization of Cultural Heritage, Ascona, Switzerland, May 22-
27,2005.

Alshawabkeh, Yahya & Haala, Norbert [2004]
Laser Scanning and Photogrammetry: A Hybrid Approach for Heritage Documentation. 3rd
International Conference on Science & Technology in Archeology & Conservation, Amman,
Jordan.

Alshawabkeh, Y. & Haala, N. [2004]
Integration of Digital Photogrammetry and Laser Scanning for Heritage Documentation,
ISPRS Kongress 2004, Volume 35, Part B, Istanbul, Turkey, digital
on CD, 6 pages.

Haala, Norbert & **Alshawabkeh, Yahya** [2003]
Application of photogrammetric techniques for heritage documentation, 2nd International
Conference on Science & Technology in Archeology & Conservation, Jordan.